


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	
Thomas A. Berson et al.	§	Group Art Unit: 3736
	§	
Serial No.: 10/776,444	§	
	§	Examiner: Kremer, Matthew
Filed: February 10, 2004	§	
	§	
For: SENSOR WITH SIGNATURE OF	§	Atty. Docket: P0230S-01
DATA RELATING TO SENSOR	§	
	§	TYHC:0053/FLE/POW

Mail Stop Amendment  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this correspondence is being deposited with the U.S. Postal Service, with sufficient postage, as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450:	
3/17/06 Date	 Michael G. Fletcher

Sir:

**DECLARATION UNDER 37 C.F.R. § 1.131**

I, Paul D. Mannheimer, hereby declare as follows:

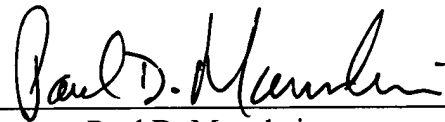
1. My residence, post office address, and citizenship are set forth below, adjacent my signature.
2. I am a co-inventor of the above-referenced application.
3. I have reviewed the currently pending claims in the above-referenced application, as amended in the Response and Amendment filed herewith.
4. I, along with my co-inventors, conceived of the subject matter disclosed and claimed in

in the above-referenced application prior to June 9, 1999. This conception is evidenced by a document entitled "Digical Memory Architecture/Layout" that was prepared prior to June 9, 1999, a redacted copy of which is attached as Exhibit 1. The Digical memory is located on a pulse oximeter sensor, and the memory contains data relating to the sensor and contains a digital signature, as evidenced by Exhibit 1.

5. I, along with my co-inventors and other employees of Nellcor Puritan Bennett Incorporated was involved with the design, testing, and manufacture of the Digical memory and the related Oximax Sensor and Monitor as part of an ongoing project from prior to June 9, 1999 through at least the end of 1999. During this period, activity took place on substantially a daily basis with regard to the design, testing, and manufacturing efforts.
6. At least as early as August 31, 1999, we had programmed a Digical memory with data related to a pulse oximeter sensor and with a digital signature, as evidence by the programming document, a redacted copy of which is attached as Exhibit 2.
7. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements, and the like, are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

3/15/06



Paul D. Mannheimer

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## **DIGICAL MEMORY ARCHITECTURE / LAYOUT**

This document describes the memory architecture and field definitions for the DigiCal EPROM memory.

### **General Field Families**

Non-Signed, non-masked data that is not altered by the signing process and does not affect the signature. This would include data that is non-functional or that may change after the signing process.

Signed, non-masked data that needs to be included in the generation of the signature and placed into the EPROM, but that needs to be identifiable without going through

the signature verification or un-masking process.

Signed, masked and error checked data that can "float" and is written at final test during sensor manufacture.

### **SIGNATURE FIELD**

The signature field consists of      bits of information. Of that,      bytes are the hash function for extracting the entire message.

The remaining      bits constitute the first part of the message content. This contains protected information that the sensor carries.

The signing version indicates what version of signing software was used to manufacture the sensor. If the signing software changes in a way that makes the sensor unreadable to the OxiMax box it should not attempt to operate it.

**Sensor ID**

A string of ASCII characters that the oximeter can display, without interpretation, will indicate to the user the type of sensor being used. This could be included on communicated or printed records as well to further indicate the monitoring status.



Programmed 8/31/99 4:09pm

DS1983 (DS2503): 9060000002AAF613 Dallas Serial Number

ASCII	Description
Copr1999MKG.....	Copyright Signing Version
	ID

▶▶ "Masked Information"